

South Carolina's Environmental News for Educators ● "News Teachers Can Use!"

### Brownfields: Recycling Land for Reuse

Do you have an abandoned textile mill or an old gas station in your community that is being overlooked for redevelopment? Environmental pollution, or the perception that there is environmental pollution on this property may be the reason why these properties are not being redeveloped. These properties are what we at the South Carolina Department of Health and Environmental Control (DHEC) call "brownfields." A brownfield site is real property where the expansion, redevelopment, or reuse is being hindered due to real or perceived environmental pollution.

In 1995, the US Environmental Protection Agency (EPA) recognized that brownfield sites needed to be addressed. Why? Because assessing these sites would remove any uncertainty potential developers may have, thereby spurring redevelopment. Polluted properties have long been considered burdens because of liability concerns, social stigma, high cleanup costs, uncertain requirements, and poor marketability. Successful redevelopment of a brownfield site can yield high profits for developers, provide solid tax revenue for local governments, renew aging communities, create new jobs, and be an instrumental tool for counteracting urban sprawl. Redeveloping Brownfields were sure to be a win-win for everyone.

The EPA began addressing redevelopment of brownfields by awarding grant monies. Four types are given, and they are the assessment grant, the cleanup grant, the job-training grant, and a brownfields cleanup revolving loan fund. The EPA provides oversight on these grants. Eleven municipalities across South Carolina have been awarded brownfield monies from the EPA thus far. They are: the Towns of Cowpens and Ware Shoals; the Cities of Anderson, Charleston, Columbia, Florence, Greenville, Laurens, Rock Hill; Spartanburg County, and the Catawba Regional Council of Governments.

DHEC also has a program to assist with redevelopment of brownfields, known as the Voluntary Cleanup Program (VCP). The VCP allows nonresponsible parties an opportunity to partner with us to assess and/or cleanup, if necessary, a site. Once the nonresponsible party has completed the work required within the Voluntary Cleanup Contract (VCC), they receive State Superfund liability protection from DHEC. This is just another way to ensure comfort to parties that are purchasing certain properties. Approximately 50 nonresponsible parties have entered into a VCC with DHEC since this portion of the VCP began in 1996.

How can you as a teacher become involved with redeveloping a brownfield? Pair your class with either a local government that has received a grant, or a non-responsible party, to see firsthand how a brownfield is redeveloped and how this impacts your community.

For additional information on the Voluntary Cleanup Program and brownfields within South Carolina, please call or e-mail Karen Sprayberry, Division of Site Assessment and Remediation, at (803) 896-4252, or e-mail her at spraybkj@dhec.sc.gov.



The SC Aquarium located in Charleston, SC, was the recipient of the 2002 Phoenix Award for Community Impact. This national award recognizes prestigious brownfield redevelopments across the country. The Aquarium sits on property that was extremely polluted with chemicals from a former manufactured gas plant that once operated across the street from the present site.

# Champions Of The Environment Awards Grants To Two Middle Schools

The most recent winners of a \$500 Champions of the Environment grant are South Middle School in Lancaster and Gilbert Middle School in Gilbert. Champions of the Environment encourages environmental action and awareness. This is done by rewarding outstanding environmental projects. Up to 10 \$500 grants are awarded during the school year. The money may be used to improve an existing project or used for a new project that will protect or improve the

environment.

Eighth graders at Gilbert Middle School began the year studying their local community. They learned about local history and the environment. After a study of the local watershed, the students decided to look more closely at a nearby wetland. The resulting wetland study involves all of the core learning subjects - Science, Language Arts, Social Studies and Math. The students mapped the wetland and surveyed the plant and animal life. They performed a litter cleanup in the wetland and found that more than litter was making its way into the area. Sand from an adjacent dirt road is washing into the wetland. Students have written to the county public works department to see if a solution to the problem can be worked out. With all their knowledge of wetlands the students have written an original puppet show about wetlands. They will perform the puppet show for the

Gilbert community and invited quests on Earth Day, April 22. Congratulations to these Warriors of the Wetlands!

The seventh graders at South Middle School are just beginning their Environmental Preservation Project. The goals of this project are to improve and protect the school's grounds and to reduce resource use. Students will study energy and what they

> throw away. By studying home energy use they hope to find ways to conserve energy at home. This will also help them find ways to conserve energy at

> > school. A recycling project will be started at the school. Outside on school grounds, students will get their hands dirty while working on the green space around their school. Encouraging the use of walkways will reduce the erosion on school grounds. Compost will be prepared and used to enrich the soil for new plantings. Trees and flowers will be planted and feeders

added to the planted areas to attract wildlife. By the end of this year, the students will see that their actions can make a difference when it comes to

protecting the environment!

Champions of the Environment is sponsored by INVISTA, International Paper, WIS-TV and SC DHEC. To find out more about Champions of the Environment please visit our web page, www.scdhec.gov/champions, or contact Lynne LaSalle at (803) 898-4394 or lasallli@dhec.sc.gov.

### Celebrate Earth Day Thursday, April 22

The S.C. Department of Health and Environmental Control is sponsoring the "Earth Today" show. "Earth Today" is a half-hour program that features student anchors and reporters in a network morning news format.

The program provides segments on a variety of environmental issues including air and water quality, energy conservation, recycling and litter prevention.

The program will air statewide Thursday, April 22, 2004 from 1 to 1:30 p.m. on all South Carolina ETV stations. In addition, "Earth Today" will be offered nationwide to PBS stations through satellite coordinates-TELESTAR5/TRANSPONDER#14 (TC5/TP/14).

"Earth Today" features 21 lesson plans specially developed for third to eighth grade students that focus on specific segments in the program. Each of the lesson plans has been correlated to the S.C. Science Standards and includes the standards, an overview, background, lesson plan and links

> to additional information. In addition, the overall program features a pre- and post-test for teachers.

> > Earth Today has been developed by the S.C. Department of Health and Environmental Control, S.C. Energy Office, PalmettoPride, South Carolina ETV and Instructional Television, S.C. Department of Education, U.S. Environmental Protection Agency and International Paper.

For more information about "Earth Today" or Earth Day celebrations across

South Carolina visit www.scdhec.gov/earthtoday or call 1-800-768-7348.



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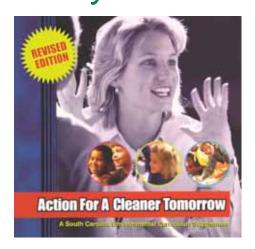
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### "Action for a Cleaner Tomorrow" Newly Revised



The S.C. Department of Health and Environmental Control has trained over 20,000 teachers on "Action for a cleaner tomorrow: A South Carolina Environmental Curriculum Supplement" ("Action").

"Action" has recently been revised to include current and in-depth background information for all of the lessons. All 156 lessons, which encompass a variety of environmental issues, including air, water, energy and recycling, have been correlated to the S.C. Language Arts, Mathematics, Science and Social Studies curriculum standards.

Included on the CD are videos, Web links, an environmental glossary and great lesson resources.

To receive a copy of the newly revised "Action for a cleaner tomorrow" CD, teachers have to participate in a training to learn how to maneuver through the CD—to learn how to get the most from the curriculum. Visit www.scdhec.gov/recycle/html/calendar.html to find out when the next training is scheduled in your area, or call 1-800-768-7348 to set up a training for your school.



Energy 2 Learn (E2L) the Summer Workshop will be held Wednesday, June 23 in Columbia. E2L is a comprehensive workshop for K-12 teachers. The sixth annual workshop is limited to 200 teachers. There is no charge to register, and the registration deadline is May 14.

This year's workshop will include the introduction of the revised CD-ROM of "Action for a cleaner tomorrow: A South Carolina Environmental Curriculum Supplement," introduction of the new "Energy 2 Learn: The Classroom Presentation," recognition of the 2003 Energy Educator of the Year and other exciting sessions.

For more information about E2L or to receive a registration form, visit www.scdhec.gov/recycle/html/e2l.html or call 1-800-768-7348.

To reduce waste, this newsletter is provided electronically. If you need a printed copy, please use **RECYCLED** paper.

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